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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LEE, ANDREW CHUNG CHEUNG	
ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/943,956	TANG ET AL.	
	Examiner	Art Unit	
	Andrew C. Lee	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08/31/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13, 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 13, 19, the phrase "about" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 6, 28, 31, 32, 2, 3, 7, 4, 8, 9, 11, 12, 18, 29, 14, 30, 15, 16, 17, 27, 20, 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yim et al. (U.S. Patent No. 6580727 B1) in view of the Article "Efficient Implementation of Semaphores in Controller Area Networks" by Cena et al., Industrial Electronics, IEEE Transactions on, Volume 46, Issue 2, April 1999, PP417-428.

Regarding claims 1, 6, 28, 31, 32, Yim et al. discloses the limitation of a system for an ADSL access network for providing ADSL provision flow control at a DSLAM switch (Fig.1, column 1, 40 – 48, 55 – 63), comprising: a network management system in communication with an element management system (column 6, lines 7 – 13) that is in communication with the DSLAM switch (column 2, lines 28 – 31), the network management system including a control algorithm for controlling ADSL provision flow on a DSLAM switch by introducing a two level (column 5, lines 60 – 66). wherein the first controls a first provision request flow at the element management system level (column 5, lines 60 – 66) and the second controls a second provision request flow at the DSLAM switch level (column 5, lines 60 – 66). Yim et al. does not disclose expressly a semaphore including a first semaphore and a second semaphore. The Article by Cena et al. discloses the limitation of semaphore including a first semaphore and a second semaphore (page 418, Third paragraph, lines 19 – 29). It would have been obvious to modify Yim et al. to include a semaphore including a first semaphore and a second semaphore such as that taught by the Article (by Cena et al.) in order to provide the application designer with a powerful support with which to synchronize the concurrent activities and offers a high degree of reliability and efficiency at the same time.

Regarding claim 2, Yim et al. discloses the limitation of the system according to claimed further comprising the element management system in communication with the DSLAM switch (column 2, lines 28 – 31; column 9, lines 33 – 37).

Regarding claims 3, 7, Yim et al. discloses the limitation of the system according to claimed further comprising at least one of the following: a plurality of DSLAM switches in communication with the element management system (column 5, lines 1 – 4; column 9, lines 59 – 66). Yim et al. does not disclose expressly a semaphore count register in communication with the control algorithm. The Article by Cena et al. discloses the limitation of a semaphore count register in communication with the control algorithm (page 420, third paragraph, lines 18 – 22; page 421 – 422, Fig. 3, third paragraph, lines 19 – 29). It would have been obvious to modify Yim et al. to include a semaphore count register in communication with the control algorithm such as that taught by the Article (by Cena et al.) in order to provide the application designer with a powerful support with which to synchronize the concurrent activities and offers a high degree of reliability and efficiency at the same time.

Regarding claim 4, Yim et al. discloses the limitation of the system according to claimed further comprising a first object defined by the network management system for representing that a GUI operator is requesting activity on the DSLAM switch (column 11, lines 26 – 29).

Regarding claim 8, Yim et al. discloses the limitation of the system according to claim 6, further comprising a plurality of means for multiplexing an ADSL subscriber line in communication with the means for managing an ADSL access network element (Fig. 2, elements 22, column 5, lines 8 – 12).

Regarding claim 9, Yim et al. discloses the limitation of the system according to claimed wherein the system includes the means for managing the ADSL access network further comprising a first object whose attribute is defined by the means for managing the ADSL access network for representing that a GUI operator is requesting activity on the means for multiplexing the ADSL subscriber line (column 9, lines 37 – 46; column 10, lines 48 – 50; column 11, lines 26 – 29).

Regarding claim 11, Yim et al. discloses the limitation of a method of providing ADSL provision flow control at a DSLAM switch, comprising: sending a provision request from a network management system to a DSLAM switch (column 9, lines 33 – 37; column 10, lines 10 – 16; lines 48 - 50); determining whether a DSLAM level semaphore is available at the DSLAM switch (column 11, lines 29 – 36); determining whether an element management system level semaphore is available (column 11, lines 48 – 54); and connecting the network management system to the DSLAM switch (column 12, lines 7 – 18).

Regarding claims 12, 18, 29, Yim et al. discloses the limitation of the method according to claimed further comprising delaying when the DSLAM level semaphore is not available (column 11, lines 7 – 19).

Regarding claims 14, 30, Yim et al. discloses the limitation of the method according to claimed further comprising determining whether a connection is being

configured on a corresponding DSLAM switch when the DSLAM level semaphore is available at the DSLAM switch (column 11, lines 26 – 36; column 12, lines 55 – 63).

Regarding claim 15, Yim et al. discloses the limitation of a method of providing ADSL provision flow control at a DSLAM switch, comprising: sending a provision request from a network management system to a DSLAM switch (column 9, lines 33 – 37; column 10, lines 10 – 16; lines 48 - 50); Yim et al. does not disclose expressly the method according to claimed further comprising locking the level semaphore to the switch when a connection is being configured on the DSLAM. The Article by Cena et al. discloses the limitation of the method according to claimed further comprising locking the level semaphore to the switch when a connection is being configured on the DSLAM (page 420, first column, first paragraph, lines 1- 16). It would have been obvious to modify Yim et al. to include the method according to claimed further comprising locking the DSLAM level semaphore to the DSLAM switch when a connection is being configured on the DSLAM such as that taught by the Article (by Cena et al.) in order to provide the application designer with a powerful support with which to synchronize the concurrent activities and offers a high degree of reliability and efficiency at the same time.

Regarding claim 16, Yim et al. discloses the limitation of the method according to claimed further comprising blocking other connection requests on the DSLAM switch when a connection request is being configured on the DSLAM switch (column 9, lines 33 – 42).

Regarding to claims17, 27, Yim et al. discloses the limitation of a method of providing ADSL provision flow control at a DSLAM switch, comprising: sending a provision request from a network management system to a DSLAM switch (column 9, lines 33 – 37; column 10, lines 10 – 16; lines 48 - 50); Yim et al. does not disclose expressly the method according to claimed further comprising releasing the level semaphore when the element management system semaphore is not available. The Article by Cena et al. discloses the limitation of the method according to claimed further comprising releasing the level semaphore when the element management system semaphore is not available (page 421, Fig. 3, second column, lines 10 – 27). It would have been obvious to modify Yim et al. to include the method according to claimed further comprising releasing the level semaphore when the element management system semaphore is not available such as that taught by the Article (by Cena et al.) in order to provide the application designer with a powerful support with which to synchronize the concurrent activities and offers a high degree of reliability and efficiency at the same time.

Regarding claim 20, Yim et al. discloses the limitation of a method of providing ADSL provision flow control at a DSLAM switch, comprising: determining whether a provision request for a DSLAM switch was issued by a GUI operator (column 10, lines 35 – 37, lines 48 – 50); and resetting an attribute associated with the provision request made by the GUI operator (column 12, lines 40 – 46).

Regarding claim 21, Yim et al. discloses the limitation of a method according to claimed wherein resetting an attribute comprises resetting an object associated with the provision request made by the GUI operator (column 10, lines 35 – 37, lines 48 – 50; column 12, lines 40 – 46).

5. Claims 5, 10, 23, 25, 26, 13, 19, 22, 24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yim et al. (U.S. Patent No. 6580727 B1) and the Article "Efficient Implementation of Semaphores in Controller Area Networks" by Cena et al., Industrial Electronics, IEEE Transactions on, Volume 46, Issue 2, April 1999, PP417-428 as applied to claims 1, 6, 28, 31, 32, 2, 3, 7, 4, 8, 9, 11, 12, 18, 29, 14, 30, 15, 16, 17, 27, 20, 21above, and further in view of Tang et al. (U.S. Patent No. 6885672 B1).

Regarding claims 5, 10, 23, 25, 26, both Yim et al. and the Article by Cena et al. do not disclose expressly the system according to claimed further comprising a second object defined by the network management system for representing that a batch process is requesting activity on the DSLAM switch. Tang et al. discloses the limitation of the system according to claimed further comprising a second object defined by the network management system for representing that a batch process is requesting activity on the DSLAM switch (column 1, lines 42 – 45). It would have been obvious to modify both Yim et al. and the Article by Cena et al. to include a system according to claimed further comprising a second object defined by the network management system for representing that a batch process is requesting activity on the DSLAM switch such as

that taught by Tang et al. in order to provide a system and method for provisioning virtual circuit orders on a telecommunications network.

Regarding claims 13, 19, both Yim et al. and the Article by Cena et al. do not disclose expressly the method according to claimed wherein delaying comprises delaying for about 10-15 seconds, and the delaying is different between a GUI order and a batch order. Tang et al. discloses the limitation of the method according to claimed wherein delaying comprises delaying for about 10-15 seconds, and the delaying is different between a GUI order and a batch order (column 4, lines 1 – 4). It would have been obvious to modify both Yim et al. and the Article by Cena et al. to include a the method according to claimed wherein delaying comprises delaying for about 10-15 seconds, and the delaying is different between a GUI order and a batch order such as that taught by Tang et al. in order to provide a system and method for provisioning virtual circuit orders on a telecommunications network.

Regarding claims 22, 24, both Yim et al. and the Article by Cena et al. do not disclose expressly the method according to claimed wherein determining whether a provision request was issued by a GUI operator comprises determining whether a GUI request flag is set. Tang et al. discloses the limitation of the method according to claimed wherein determining whether a provision request was issued by a GUI operator comprises determining whether a GUI request flag is set (column 4, lines 49 – 51). It would have been obvious to modify both Yim et al. and the Article by Cena et al. to include a of the method according to claimed wherein determining whether a provision

request was issued by a GUI operator comprises determining whether a GUI request flag is set such as that taught by Tang et al. in order to provide a system and method for provisioning virtual circuit orders on a telecommunications network.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajit Patel
Primary Examiner

ACL AU::2664 May 12, 2005